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CONTRIBUTION ANALYSIS AS AN APPROACH TO ENABLE PUBLIC MANAGERS TO DEMONSTRATE PUBLIC VALUE: THE SCOTTISH CONTEXT

Purpose: The purpose of this article is twofold. First, the article considers the level of congruence between contribution analysis and public value. Second, based on the Scottish context, the article examines how contribution analysis can be used as a method to support public managers to demonstrate value within partnership contexts in times of acute governance challenges (including in times of austerity).

Design/methodology/approach: The empirical underpinning of the article emerges from strands of applied public sector experience and consultancy with national agencies. The author was a public manager (up to 2013) within a national government agency - NHS Health Scotland. The research is also informed by data gathered as an academic consultant in contribution analysis with national partnership-based agencies (Healthcare Improvement Scotland and Education Scotland (2013-present)) through a series of workshops as part of consultancy activity on capacity building in relation to evaluation methodology and practice.

Findings: Based on research and experience with three national public sector agencies in Scotland, the article demonstrates how public managers, despite difficult challenges, have adopted contribution analysis and how this has served to facilitate public value.

Originality/value: In a time when public managers are facing acute challenges in demonstrating the impact of their programmes and services due to the dynamics of complex governance systems coupled with the pressure of austerity, this research helps to equip public managers with strategies to enable the demonstration of public value in pragmatic terms.

Keywords: public value, contribution analysis, outcomes, impact, Scotland

INTRODUCTION

The dominant narrative of this article is couched within the context of public value (Moore, 1995; Stoker, 2006; O’Flynn, 2007; Alford and Hughes, 2008; Alford and O’Flynn, 2009; Williams and Shearer, 2011; Bryson *et al.* 2014; Hartley *et al.* 2015; Rutgers, 2015). There are debates about whether the concept of public value represents a new phase for public administration (Alford and Hughes, 2008), a new paradigm (Stoker, 2006), an analytical frame (Williams and Shearer, 2011), a confused concept (Rhodes and Wanna, 2007), or a paradigm refinement from New Public Management (Pyper, 2015). A consistent theme throughout these considerations is that, for public managers, complexity is an inherent aspect of what they do and public managers need to find ways to navigate through complex landscapes whilst seeking to achieve, and being held to account for, value-creation (Moore, 1995). This article considers that contribution analysis can be used to navigate what many have described as the complexities of network governance (see Rhodes, 1994; Haynes, 2015; O’Toole, 2015). In definitional terms, contribution analysis is an approach developed by John Mayne (2001) for examining causal questions and determining causality, based on evidence and plausibility, in programme evaluation (the components of the contribution analysis process are highlighted later in the article). What carves contribution analysis out from other approaches which have a goal-focused or option-based orientation is the drawing together of planning *and* evaluation to enable public managers, policy-makers and researchers to understand the extent to which programme or policy outcomes are the result of policy interventions, programmes or service-level activities (Scottish Government, 2011). A further key ‘contribution’ of contribution analysis is that it acknowledges complexity from the outset and enables policy and programme actors to develop an evidenced-based narrative of why observed results have occurred (or not as the case may be) including the roles and impacts of internal and external factors (Mayne, 2012). The approach is also a means by which public

managers can demonstrate the achievement of outcomes or the ‘value-added’ from interventions within in partnership contexts (Alford and Hughes, 2008). Contribution analysis elevates the importance of both context and the need for pragmatism in the use of evidence which, in short, is what public administrators need to know about in light of the twin pressures of austerity and the ever present pressures of the ‘outcomes agenda’ in the public sector. In this context, contribution analysis is a mechanism for channelling and executing public value and to make sense of the world of complex interactions. This serves to move the academic debate forward by rebuking criticisms that value-based approaches to the understanding of public sector governance represent no more than rhetorical strategies without any methodological backbone (Roberts, 1995). In short, the research objective driving this paper is to consider the potential utility of contribution analysis is representing a methodology for taking forward analyses and assessments of public value.

Although evaluation has been the primary focus in studies of contribution analysis, of which most seem to talk about the approach rather than actually apply it (Delahais and Toulemond, 2012), far less emphasis has been placed on how contribution analysis can support public managers to create value within partnership contexts (see Mayne, 2007; 2012; Wimbush *et al.* 2012; Connolly *et al.* 2015). This is a problem for public managers working in the modern public administration environment. For example, one public manager said in a recent workshop led by the author: “my problem is how do show the value of what we do when our programmes form part of a system and given that me, and my team, need to work with a range of partners, including the government, in showing our worth” (Education Scotland workshop participant, 2015).

Methodology

The empirical underpinning of the article emerges from strands of applied public sector experience and consultancy activities with national public sector agencies. The author was a public manager (up to 2013) within a national government agency - NHS Health Scotland. NHS Health Scotland is a national (non-territorial) Health Board working with public, private and third sectors to reduce health inequalities and improve health. The roles of the author included conducting and commissioning evaluations of complex policy national interventions (including programmes involving collaboration between the public and third sectors e.g. the national 'Keep Well' programme - discussed later in this article), leading on the capacity building of outcomes-based evaluation with public sector partners, and advising government officials on policy/programme evaluation. The research is also informed by data gathered as an academic consultant in contribution analysis with national partnership-based agencies with Healthcare Improvement Scotland and Education Scotland (2013-present) through a series of workshops as part of consultancy activity on capacity building on the use of contribution analysis within national agencies. In terms of the remit of the agencies, Healthcare Improvement Scotland aims to support and empower people to have an informed voice in managing their own care and shaping how services are designed and delivered; scrutinise healthcare practice; provide quality improvement support to healthcare providers, and provide clinical standards, guidelines and advice based upon the best available evidence (Healthcare Improvement Scotland, 2015). Education Scotland is an executive agency of the Scottish Government and aims to improve the quality of Scotland's education system (Education Scotland, 2015).

The workshops with national agencies (generally made up of 15-20 participants) were made up of programme teams with senior programme/Directorate lead, programme manager, representatives from research, data management and evaluation personnel, project officers, and officials with partnership focused/external facing roles e.g. with local authorities, health boards and third sector bodies). Although much of the learning gathered from this research corresponds directly with the Scottish public sector, the lessons drawn from Scotland have much broader implications for public managers across states who operate within network governance contexts. Public managers from a range of jurisdictions will want to know more about securing public value but need more practical insights and methodological grounding on how to actually undertake this process (and this also serves to build on the dearth of literature on the application of public value situated in state contexts – see Try and Radnor, 2007; Hovik and Hanssen, 2015).

Public Value Management

The concept of public value has been described in various ways leading to claims that it is ‘confused’, ‘fuzzy’, and ‘vague’ (Rhodes and Wanna, 2007; Williams and Shearer, 2011; Rutgers, 2015). Rhodes and Wanna (2007) question the transferability of the concept from the US system where the decision-making autonomy of public officials are more clearly delineated. However, the view that the concept lacks transferability can be challenged given that public managers are being held to account for the quality and ‘value-added’ of services in network contexts (Bennington and Moore, 2001). Public value management refers to the work of public managers as ‘value-seekers’ (Moore, 1995) in taking forward a new governing process (Rhodes, 1997). This is in order to manage, steer and navigate through complex interactions within collaborative networks in order to demonstrate the impact and create value at *macro*, *meso* and *micro* levels (Huxham and Vangen, 2006). The literature suggests that

public value, and value-creation processes, is associated with the following: co-production and citizen participation, managerial autonomy and accountability, emphasis on outcomes, pragmatism and methodological ideological purity, devolution of authority, evaluative and responsive organisational culture, organisational learning, continuous innovation, network management, and collaboration and partnership-working (Moore, 1995; Alford and Hughes, 1998; Stoker, 2006; O'Flynn, 2007; Try and Radnor, 2007; Alford and O'Flynn, 2009; Williams and Shearer, 2011; Bryson *et al.* 2014; Hartley *et al.* 2015; Rutgers, 2015). Bryson *et al.* (2014, p.455) maintain that much more work is needed to understand the processes that produce and sustain public value. It is rather notable that within public value research that there is scarce discussion about how public managers can pragmatically navigate network governance contexts in order to demonstrate impact at multiple levels (the debates are often conceptual and usually take place between academics). In terms of navigating to seek public value (Moore, 1995), it is important for public managers to recognise that societal outcomes are likely to be influenced by economic, social and political forces, and the greater degree of multi-partnership working, the more likely are the risks of such forces impacting on the achievement of outcomes. Although much has been written about the challenges of policy and programme implementation (e.g. see Barrett, 2004; Hill and Hupe, 2014), bringing together planning and evaluation processes minimises the risks of programme and policy failure and enhances opportunities for policy success through partnership-based implementation processes (Marsh and McConnell, 2010; Hill and Hupe, 2014). In this respect, public managers need support and guidance when it comes to 'doing' public value and contribution analysis can make a contribution to this agenda.

Pursuing Public Value: Contribution Analysis

The conceptual development and application of contribution analysis has emerged from results-based management incorporating public management principles. Canada has led the way in terms of framing how the approach is appropriate for modern public administration (Treasury Board of Canada, 2003; Try and Radnor, 2007; Mayne, 2012). As such, there has been a significant degree of transnational policy learning by NHS Health Scotland who have adopted the approach for planning and evaluating public health programmes (see NHS Health Scotland, 2014; 2015) and have also influenced the Scottish Government in using contribution analysis as way to demonstrate impact against national-level outcomes (known as the National Performance Framework) and for evaluating major policy programmes (e.g. the legacy of the 2014 Commonwealth Games) (see Scottish Government, 2011; 2013; 2015).

The approach seeks to uncover plausible alternative explanations other than that of specific policies and programmes account for outcomes, such as other related government programmes, economic or social trends. It involves identifying the most likely alternative explanations and, where appropriate, discounting them – akin to a falsification process (Popper, 1963). This helps to increase levels of confidence amongst stakeholders about programme, organisational and policy impact. The fact that there is an *a priori* relationship between processes and outcomes means there is a need to understand what is happening at the delivery end. A means of doing this is through involving the users of public services in co-producing outcomes and outcome indicators. Public managers who adopt this approach also need to be conscious about gathering a range of evidence combinations when it comes to demonstrating how programmes have contributed to outcomes (e.g. population-based statistics, survey data, needs assessments, process and outcome evaluations, economic analysis and evaluation, systematic reviews and other evidence synthesis, international policy and analytical work, reports of stakeholder meetings/discussions, policy documents, diaries,

testimonies, observations, field notes, communications, press clippings, questionnaires, descriptive statistics, financial information). The reporting of the use of evidence combinations should lead to logical argumentation in the assessment of the extent to which an intervention was a contributory cause to observed changes in outcomes and in the production of value (Wimbush *et al.* 2012, p.312).

A range of tools can be used as part of the contribution analysis process and these include logic models (also known as ‘log frames’), results chains, and multiple results chains. What these tools have in common is that they serve to support individuals, programmes and organisations in defining problems and the identification of the means by which such problems can be addressed based on evidence and plausible theory. The context of policy and programmes is of paramount importance in terms of attributing cause. As Blamey and Mackenzie (2007, p.441) note, context is ‘vital for theory of change approaches terms of replicating the intervention in any future setting or in learning about possible generalizable causal pathways’. If a theory of change, or impact theory, is not formulated then it will be difficult to answer *why* programmes have worked i.e. in terms of what has made the difference in *X* producing *Y* and understanding the intervening variables mechanisms that mediate between *X* and *Y* - leading to evaluation ‘black boxes’ (Weiss, 1995). Programmes can benefit from the insights of professionals who bring an array of insights and experiences from public policy, programme management and implementation in ensuring shared stakeholder ownership at all stages for the process. ‘Who’ is represented depends on the programme but typical examples include the programme funder, programme lead/manager, programme officers, a research/data adviser, practitioners and, if appropriate, voluntary groups or representatives of the key programme beneficiaries or service-users (e.g. patient groups). This is particularly crucial at the planning stage (i.e. when agreeing programme outcomes) in order to ensure that stakeholders ensure that there is an adequate

level of buy-in and agreement on outcomes (at all levels). Taking a participative approach to such planning is an effective way to build trust between partners - with trust being essential to the establishment and maintenance of collaborative relationships (Alford and Hughes 2008, p.140). At a process, or what could also be described as an 'innovative activity' level (Salge and Vera, 2012, p.551), there is also latitude for innovative practices given that partners have the managerial scope and autonomy to implement actions that will achieve programme outcomes efficiently and effectively. The role of the Scottish Government, as an *enabler* in terms of expecting lower-level institutional levels in the public sector to own (across partnerships) the delivery and demonstration of top-down outcomes, resonates with the diffusion of innovation theory (Rogers, p.2010). Innovators (e.g. national government agencies) require adopters or change agents to advocate for the use of contribution analysis amongst partners. These agents are likely to be public/programme managers operating at a *meso* level who will ultimately bring partners together to tell a plausible narrative about programme impact (e.g. public managers from local authorities and health service boards, for example).

The learning-based nature of the process, with 'learning' also underpinning interpretations of public value (Stoker 2006, p.47), is such that the evaluation frameworks which emerge from the process should be updated and revised in light of changes in the programme context and in the emergence of new evidence. With key stakeholders present, including the programme funder, there are opportunities here for participants to determine the level of resource required in order to have the best chance of achieving outcomes. This means that the plan, logic model, and results chain can be used as a tool for negotiation and deliberation in order to inform discussions about resource allocation i.e. without partnership contributions, there will be performance gaps which, in turn, will have detrimental implications for value-creation. Notwithstanding this, and although the process of contribution analysis could be

said to have a rationalist orientation to it, the approach acknowledges that complexity is a given nor is the process value-free. Unlike other models - such as bureaucratic politics models (Rosenthal *et al.* 1991) which suggest that there are no agreed objectives/outcomes between actors - this is something that contribution analysis seeks to address by, from the outset, grouping programmes around agreed partnership-defined outcomes. It would be incorrect, however, to suggest there is a scarcity of policy conflict. Conflictual behaviours are often apparent at the planning stages in the endeavour to reach agreement on outcomes between partners. The approach requires consensus- and coalition-building by facilitators with inputs from politically astute public managers (Hartley *et al.* 2015). The realities of planning processes which involve multiple and, frequently, cross-sectoral partners is such that ensuring cross-stakeholder buy-in throughout the contribution analysis process is challenging. A strategy to mitigate against conflict reaching dysfunctional levels (which could ultimately undermine and paralyse the process) is to have facilitators who a) are knowledgeable about, and have experience of, the policy or programme contexts, and b) can fulfil the role of ‘critical friend’ who can claim to have a level of independence from those who will be responsible for programme redesign, implementation and evaluation (see Connolly *et al.* (2015) who discuss how such workshops are conducted in terms of their specific contents and their structure with key reference to the learning and development literature).

The contribution analysis process is made up of the following main components:

- i) *Problem definition and model construction*: The process starts with an analysis of the current situation being addressed - known as a ‘situational analysis’, or ‘stakeholder analysis’ (see Brugha and Varvasovszky, 2000), before identifying potential

‘solutions’. The theory of change is articulated through a participatory and facilitated process within a workshop context (Connolly *et al.* 2015). The main parties with an interest in the programme come together to discuss and define the problem including the intervention(s) required and how progress will be assessed. For example, this could be a societal-level problem. This problem should be translated into a vision for change and this represents (representing the long-term outcome). For example, NHS Health Scotland’s priority in terms of long-term outcomes is reductions in health inequalities in Scotland. In turn, there will be changes required at behavioural/organisational levels in order to achieve long-term outcomes. This means that medium-term outcomes (also known as ‘intermediate’ outcomes) need to occur (and there are often several of these) which feed into long-term outcomes. However the links between medium- and long-term outcomes (and, in fact, between short- and medium-term outcomes) need to be based on the best available evidence and, in the absence of evidence, based on programme knowledge and experience. The spheres over which an organisation or agency has direct control need to be distinguished from those spheres where it has only direct or indirect influence. A programme will have *direct control* over what it invests in a programme and what it produces (inputs to outputs) and it will have *direct influence* over short-term outcomes. There is the need to consider the role of multiple partners in achieving medium to longer-term outcomes, of which programmes will have *indirect influence* over, in order to best minimise the confounding influence of wider factors (such as political, economic and social changes).

- ii) *Indicator development and evidence underpinning*: ‘What’ is being measured, represented by the outcome indicator(s), needs to be agreed amongst stakeholders as

these signify the definitions of success and failure (Marsh and McConnell, 2010; McConnell, 2015). Indicators and outcomes are often categorised as either *hard*, *soft* or *proxy* indicators (i.e. the latter being outcomes which are more difficult to define and measure and these are referred to as ‘soft’ outcomes, for example, ‘increased confidence and improved quality of life’ and/or there may be the need for ‘proxy’ indicators – these help public managers to make reasonable judgments in relation to whether outcomes are being achieved). It is also the case that decisions often need to be reached about what to prioritise when it comes to monitoring and evaluation i.e. should more attention be given to trying to demonstrate change to ‘priority’ outcomes? This may depend on the political context and, quite often, the priorities of the funder. The highest level or ‘best’ evidence should be used to demonstrate impact against outcomes around the indicators. This includes highly processed evidence (e.g. systematic reviews) and the results of quasi-experimental methods and randomised control trials (RCTs) (Pettigrew *et al.* 2013). In the absence of this, given the expense and resources required for implementing such approaches to evidence gathering, it is important to use a range of evidence sources to assess the contribution of programmes to outcomes (as outlined earlier in the article).

- iii) *Monitoring and evaluation (M&E) planning and data collection*: At this stage there is a need to focus on addressing evidence gaps by considering what data and evidence is required by way of undertaking bespoke evaluation research. A discussion needs to be had amongst partners as to who will take responsibility for collecting and storing data sources. In other words, the division of activities and the identification of who leads on aspects of both implementation and evaluation is required on the basis that multiple stakeholders subscribe to the outcomes developed at ‘stage i’. In terms of the

gathering of evidence, this approach is pragmatic in that the ‘choice of the means focuses on what is most appropriate to the circumstances, consistent with the important values at stake’ (Alford and Hughes 2008, p.2). A monitoring and evaluation plan includes details on the target populations and resources required to fulfil the monitoring and evaluation strategy (i.e. activities and the levels of outcomes underpinned by indicators - including the inclusion of risks and assumptions). This should be seen as a ‘living document’ and should be frequently reviewed and revised in light of programme or contextual changes.

- iv) *Outcomes-focused narrative reporting and dissemination:* An outcomes-focused performance report is a learning-based reporting framework for elucidating how a project or programme contributes to outcomes. Learning-based performance reporting is inextricably linked to organisational learning (Argyris, 2003) and the report is an output which emphasises how programmes can be developed for the future. It is essential that the report is ‘owned’ collectively by a programme i.e. all stakeholders should be allowed to comment on the content. This type of reporting is flexible in that, as part of a dissemination strategy, a decision could be made to provide an abridged or summarised version of the report for funders/policy-makers and the richness of the longer report can be used by programme staff for programme enhancement purposes. Once agreed by stakeholders the output should be the basis of further deliberations between partners (e.g. within a facilitator-led workshop environment) which is focused on implementing programme learning. In terms of dissemination, however, there is recognition within the contribution analysis process of the ongoing troubled relationship between evidence and public policy. Evidence about best approaches for dealing with societal problems will often be distilled,

manipulated and sometimes ignored by government (Weiss, 1999). The advantage that this approach has over other approaches to public sector reform is the fact that decision-makers should be part of the planning process - allowing for buy-in and co-production. This makes for collective programme ownership and, although there are no guarantees, increases the *potential* for the utilisation of evaluation findings by virtue of an inclusive approach to addressing societal problems.

Applying contribution analysis in the Scottish context: The ‘Keep Well’ programme

A key example from the Scottish context of the application of contribution analysis is in relation to the ‘Keep Well’ programme. This national programme formed an important part of the Scottish government’s policy is to provide safe, person-centred, effective, efficient, equitable, and timely care and, through this, to improve the experience and health outcomes of patients within cardiovascular health settings (NHS Scotland, 2010). The programme is a targeted population-based health intervention delivered via health checks and aimed to contribute to a reduction in cardiovascular disease (CVD)-mortality and morbidity (and risk factors) amongst the most deprived sections of the population in order to reduce health inequalities. The programme was rolled out across NHS Health Boards in a series ‘waves’. Each wave evolved slightly differently from its predecessor, with additional interventions and target populations within each NHS Board area having the autonomy to implement the programme according to their local requirements. Although a previous programme evaluation highlighted that ‘Keep Well’ had some impact in terms of reaching and engaging with those in areas of high deprivation (but less so with the ‘most deprived’) (Wang *et al*, 2010), there was yet to be analysis of models of implementation and of impact in terms of programme outcomes. The author was involved in setting the terms the impact evaluation with the Scottish Government. The narrative of the policy discussions were dominated by which evaluation options would be based on pragmatism due to limited financial resources. This led

to the decision that the evaluation would be pragmatic and conducted ‘in-house’ (i.e. led by NHS Health Scotland as a national agency) rather than it being externally commissioned (unlike the previous evaluation). Pragmatism gained evermore importance due to the programme knowledge that the intervention had been implemented in different ways across Health Boards involving a range of public and third sector partners. Moreover, at a research design level, opportunities for data linkage to assess health outcomes using practice-level data (from the general practice) was hampered by the lack of linked IT systems between primary and secondary care and, coupled with this, there were barriers to data release from general practices due to data governance restrictions. Nevertheless there was a need to consider what the programme was ‘there to do’ from the perspective of national Scottish Government policy-makers. This was important for two reasons. First, in order to know about ‘what’ to evaluate in terms of which outcomes will be the basis of making judgements about the success or failure of the intervention. Second, there was a need to develop a framework for researching how the programme developed, matured and was implemented in a range of geographical and organisational contexts.

Based on these developments there was an opportunity to adopt a contribution analysis approach in order to address the ‘attribution question’ of the intervention. The author worked with stakeholders (including policy officials in Scottish Government, programme managers at territorial Health Board level and a representative sample of lead clinicians with key accountabilities for the implementation of the programme) and led workshops with the stakeholders to formulate the national programme theory for the intervention. The nature and roles of participations allowed for cross-programme critical analysis and a process of cross-validation between policy and programmatic actors. As per the steps noted earlier in the

article, the approach to the evaluation development of Keep Well was grouped around the following:

- i) *Problem definition, model construction.* In terms of the theory of change (reach to long-term outcomes), the main agreed long-term outcomes were reductions in CVD mortality and morbidity and hospitalisations amongst those eligible for the intervention (those aged 40-64 in deprived areas alongside other vulnerable groups). This was based on the problem definition of there being unjust inequalities for those dying prematurely from CVD-related illness in areas of high deprivation. At the medium-term level there was a duality of themed outcomes at the organisational and individual levels. As a case in point, an organisational outcome was ‘improved inter-agency relationships’ which concerned more effective partnership-working between primary care and the third sector (with the latter being a key channel for post-intervention referral services). On the other hand, at the individual (patient) level, medium-term outcomes included ‘sustained health behaviour change post-intervention’ and ‘increased self-efficacy’. At the short-term outcome level, there were key behavioural outcomes relating to improved awareness of the benefits of implementing changes and the strategies to take this forward. This also included ‘reach’ in terms of who actually comes through the intervention and their population characteristics. In terms of activities to outputs (otherwise known as the process level), this is made up of the targeting and engagement the eligible population groups (e.g. through a range of outreach activities) and the delivery of the intervention in primary care settings.

- ii) *Indicator development and evidence underpinning.* After formulating the national programme theory with stakeholders, key outcome indicators were identified and agreed. These included percentage reductions in cardiovascular disease related mortality, hospitalisations, diagnoses and prescribing. This also included indicators that could be evidenced by local Health Board-led evaluations of the programme including evidence of increased awareness of the benefits of health behaviour changes and evidence of sustained change over time (up to and post-12 months). What the evaluation sought to do, however, was to identify the outcomes and outcome indicators that Health Board areas were working towards (which would involve understanding variations in programme implementation).
- iii) *Monitoring and evaluation planning and data collection.* The pragmatic evaluation was made up of two main components. The first was to understand variation in programme implementation by investigating evidence of local programme innovation (NHS Health Scotland, 2014: 39-40) (known as the ‘Local Variability Study’). The second evaluation component was quantitative analysis of the outcome indicators noted in section ii above. This study sought to understand the impact of the programme on health outcomes and inequalities (known as the ‘Outcomes Analysis ‘study). The evaluation was support by a *narrative synthesis* of existing evaluation studies around health outcomes (both national and locally-focused) which, made up of 15 reports, aimed to tell a trustworthy performance story about programme impact (Connolly, 2012). The first study, the Local Variability Study, included focus group interviews (led by the author of this paper with a colleague) with programme delivery teams including clinicians at Board level to understand variations in programme implementation (with approximately

10 and 15 participants per Keep Well area - with smaller groups from remote and rural areas). This involved using the national programme theory developed in 'stage i' as a guiding framework for discussions. This led to a mapping exercise of the extent to which Health Board areas departed from the national programme theory in order to understand how the programme had been translated within local contexts. Each Keep Well area was provided with local programme theories as an output from the focus groups. The study concluded that, overall, there were three dominant programme theories that guided models of delivery across Boards (1. The intervention changed the way that care is organised and delivered e.g. towards more of a partnership model between the public and third sectors; 2. The intervention promoted empowerment and co-production i.e. that the intervention allowed patients to take more ownership over their health and helped to build trust between patients and health professionals; 3. The intervention was clinically-focused and was there to address cardiovascular risk factors) (NHS Health Scotland, 2014, p.7). The analysis also found that there are factors that could be said to contribute to these variations including date of engagement with the programme, the extent to which 'Keep Well' build on existing local health promotion and social initiatives, variations in the perspectives of leaders and structural issues at a local level, and the extent of post-health check support and the availability of referral services.

- iv) *Outcomes-focused performance/plausibility reporting.* The analyses of the Outcomes Analysis study undertaken in the impact evaluation did not find that the introduction of 'Keep Well' made a difference to the established trends in the diagnosis of coronary heart disease (CHD), hypertension (high blood pressure) or

diabetes; incident hospitalisations for CHD or stroke; or in mortality for CHD or stroke (NHS Health Scotland, 2014, p.6). The narrative synthesis of existing local evaluations (conducted by the author to support the evaluation) highlighted the patchiness and variability of local studies in terms of what they are able to say about impacts of the programme on health behaviour change given that local studies include small patient samples and studies of health behaviour change are often based on self-reported data (Connolly, 2012). Yet the programme allowed for innovation at local levels (as evidenced in the variations in programme delivery represented by the three dominant programme theories). The benefits of developing local programme theories were that it allowed for understanding local variation and enabled local programme staff to direct their own evaluations where they identified the gaps in evidence around their own programme outcomes to increase opportunities for continuous improvement – with public value and continuous improvement being inextricably linked (Constable *et al*, 2008, p.9). The research process itself supported partners to understand the value of the intervention within their contexts – even if the analysis found there to be a lack of evidence to suggest that the original outcome of the Keep Well programme intended by government was not actually achieved! (i.e. to reduce CVD-mortality and morbidity and to reduce health inequalities in Scotland).

Conceptual and Empirical Congruities: Discussion

In view of what has been presented in the article thus far the remainder of the article considers the challenges and issues in implementing contribution analysis and the ways in which these challenges can be translated into programme solutions coupled with the levels of congruence between contribution analysis and public value.

Evaluative organisational cultures can sustain key benefits and outcomes for public sector organisations at *macro* (organisational), *meso* (programmatic), and *micro* (project) levels (see Wynen and Verhoest, 2015). Yet, even with this in mind, the most significant issue highlighted by public managers is that outcomes-based approaches can be seen to be bureaucratic and resource-intensive – leading to a lack of enthusiasm amongst organisational leaders (usually at Director level) to free up intellectual space. This is largely based on the concern that organisational structures are likely to require adaptation to support this process. However these perceptions tend to give way when public managers demonstrate the benefits of the approach by trialling the approach at *micro* and *meso*-levels in the organisation. This approach has had successes in Healthcare Improvement Scotland, NHS Health Scotland and Education Scotland. As a case in point, Education Scotland piloted the approach at a *meso* level to their programme on reducing the inequity gap in Scottish educational attainment. The outcome of this, as a result of disseminating the learning of the use and outcomes of the approach to senior public managers, has led to the contribution analysis approach being applied to developing their forthcoming *macro*-level corporate strategy (post-2017). The norms, rules and practices in public sector bodies can, however, often be structured around hierarchical forms of management and governance which clashes with cross-functional matrix-working. Organisational matrix-working around programmes helps to facilitate creative, stimulating and innovative practices and contribution analysis can be the mechanism by which such cultures are facilitated. This involves the programme leader/manager being the overall focus programme with programme member taking responsibility, and having authoritative claims over, their specific functions. In this respect, both types of programme staff are mutual information-gatekeepers. The applied experience of the author in presenting at Leadership forums within public sector bodies - such as Healthcare Improvement Scotland

and in Education Scotland - is that, as noted above, ‘trialling and piloting’ (and demonstrating the outcomes of this) has proven to be the way for programmes to open up opportunity windows to advocate for *macro*, *meso*, and *micro*-level organisational changes.

In addition, there is the risk that increasing resource constraints could make the meaningful implementation of contribution analysis challenging in the longer-term. Having said that, it is unlikely that public sector studies will not give prominence to outcomes in future (nor will there be no need for pragmatism). Public sector managers are being held to account for results against outcomes whilst, at the same time, having to ‘do more with less’ given the persistent and cumulative impact of austerity coupled with the challenges to increase opportunities for citizen engagement in public service design – warranting contribution analysis to have enduring application for public managers. In short, the actual need to demonstrate impact, coupled with the constraints of austerity and network governance challenges, is unlikely to change.

A further key challenge when facilitating contribution analysis with stakeholders, of which many of those may have been schooled in particular paradigms of what ‘counts’ as evidence, are certain biases towards particular methods and so-called ‘gold standards’ of evaluation (particularly within the public health and clinical sectors). The availability of evidence to demonstrate change against outcome indicators can be a concern at programme level. Questions for those facilitating the process often are: Where can data be gathered from? Who will take responsibility for this? Yet given that contribution analysis comes from a realist school of evaluation (Pawson and Tille, 1997), there is not one research paradigm that dominates the approach. That is not to say RCTs are not recognised as important. Rather, contribution analysis holds that *it depends* on the programme context and on the

appropriateness of the approach. For example, a programme manager within HIS in relation to their primary care programme indicated in a post-workshop evaluation that ‘the team have recognised the value of using contribution analysis and, in particular, the use of qualitative data which could inform the ongoing or future development of a programme’ (HIS workshop participant, 2015). In terms of evidence availability, programme teams are often surprised by the amount of evaluative evidence at their disposal - both quantitative and qualitative – which can be collected, stored and documented on a routine basis. It often requires project officers (or equivalent) to support and facilitate the adjustment of organisational processes and systems to allow this to be realisable. A key issue is agreeing amongst programme stakeholders as to who will take responsibility for data management for each outcome indicator. This usually takes place when agreeing the monitoring and evaluation plan and reporting timetables.

The academic literature also suffers from a lack of a clear reconciliation of the relationship between quality improvement (QI) methodologies and outcomes-based approaches to evaluation. This reflection emerges due to the fact that those public managers within organisations that use, and encourage, the use of QI methodologies (e.g. Healthcare Improvement Scotland and Education Scotland) are becoming increasingly concerned with the extent to which there are consistencies or otherwise between approaches. Programmatic learning from working with public sector agencies indicates that QI and contribution analysis are not necessarily out of step with each other. Although QI approaches, such as LEAN, have been termed as a ‘failed theory’ for public services (Radnor and Osbourne, 2013), at a *meso* level, improvement approaches could support contribution analysis in the sense that they help public managers to implement programmes in such a way to increase the probability that short-term outcomes will be achieved using an improvement science approach. An indicator

for the lack of incongruence between QI approaches and contribution analysis, at least in the mind of public managers, is that Healthcare Improvement Scotland, for example, as an ‘improvement’ body are following other major public sector bodies in not only adopting contribution analysis for specific improvement programmes (e.g. patient safety and mental health programmes) but are also scaling up the approach to a *macro*-organisational level by adopting the approach to evaluate their corporate strategy. The move towards outcomes in the context of public sector reform, however, means that public managers need experience, skills and knowledge in mixed methods (and awareness of the appropriates of deploying such method combinations) within particular circumstances.

Table 1 draws together the empirical data key literatures to demonstrate the congruities between public value and contribution analysis at a conceptual and empirical level (including the challenges of adopting contribution analysis). Indeed, Bryson *et al.* (2014, p. 452-453) present a convincing argument when suggesting that academic research needs to do more to address the challenges faced by public managers in seeking to achieve public value. It is without doubt that results-based approaches often require the winning of hearts and minds of senior public managers/leaders. Yet, at the same time, this article demonstrates that such challenges are not insurmountable and there are pragmatic lessons ways to mitigate these challenges.

INSERT TABLE 1

CONCLUSIONS

The article has emerged as a result of a lack of academic research on how public managers can actually create public value from a methodological perspective. This article is based on the author's experience of working within public services and latterly as an academic consultant working within public sector bodies. The transition in the roles from being more 'applied' to that of a facilitator has been a useful one in the sense that it brings a level of credibility when it comes to engaging with various partners on the contribution analysis process as a consultant facilitator. It also allows for insights on power and political dynamics and relationships with funders to be more clearly understood when working with agencies who have been tasked to take forward an evaluation of outcomes in complex contexts. This understanding can be built into discussions regarding the formulation of theories of change and with respect to the development of risks, assumptions and mitigating actions. The need to demonstrate outcomes, as has been evident in Scottish governance, continues to dominate the work of public managers who lead and manage within dense partnership networks in attempting to address 'wicked problems' (Weber and Khademian, 2008) such as social and health inequalities (as can be seen with the Keep Well example in the article). The literature

suggests that agencies have the potential to be leaders within network governance by managing networks and being the agents that draws partners together. This article also supports the perspective that ‘agencification’ allows for key opportunities for leadership and innovation within partnership contexts when there is a degree of meaningful autonomy from top-down/formalised bureaucratic control (Wynen *et al.* 2014). The article has shown how contribution analysis has many uses in supporting public managers to create public value. It represents an important new way of thinking and provides practical tools for public managers who require pragmatic and effective mechanisms for navigating complex governance landscapes. For Scotland, ‘governance is alive and well and the primary means of government. The networked ... forms of governance are less fundamental than they are tactical’ (Hill and Lynn, 2005 cited in Frederickson, 2005, p.298). In this respect, ‘tactical’ evokes a sense of context-dependence and that governance environments, and navigating through networks, as an innovative activity which requires public managers to have the skillsets for network-building, network management *and* being able to draw together evidence to demonstrate impact against outcomes. It is the public managers working at *meso* levels who tend to act as ‘champions’ by advocating the approach to senior managers within public sector bodies - thus supporting the argument that the focus of public value research needs to be re-orientated from its heavy focus on senior leaders as they are not always the change agents (see Moore, 1995). This programme-led or ‘middle-up’ approach parallels Kanter’s (1983, pp.27-35) view of organisational change through innovation who maintains that ‘macro-change’ is as a result of an accumulation of ‘micro-changes’ which are enabled by a culture of integrative thinking. This integrative thinking can be facilitated by the implementation of matrix-organisational structures around programmes.

Nevertheless, there remain further opportunities to move the links between public value and methodological approaches forward. This includes how leadership styles are an important in the pursuit of public value and which leadership styles are most appropriate at each stage in the process of contribution analysis in seeking public value. There are also questions about how public managers manage innovative approaches to democratic engagement during the value-seeking process. As Bryson *et al.* (2014, p.453) note, ‘practitioners should seek to ensure that performance measurement and management approaches ... do not diminish democratic engagement and citizenship behaviour’. There are questions about the challenges of empowering citizens to enable co-production given that notions of empowerment are likely to be governed by particular policy paradigms and vested interests which could represent the playing out of political stratagems. If public managers are political actors in the pursuit of public value (Hartley *et al.* 2015), then this also leads to questions for public managers about whether paradigms about what constitutes public value has implications for the contours of partnership-working and the contribution analysis process. More research is also required to assess the *effectiveness* partners in the contribution analysis process and which partners are ‘most engaged’. The experience of the author suggests that those partners who are set to gain from engaging in the contribution analysis process when it comes to opportunities for continuous professional development (e.g. learning about managing complexity and the appropriate use of methodologies and the marshalling of evidence to demonstrate impact) tend to be the most engaged. However, research is required to consider this further in terms of ‘who’ is most likely to effectively sustain the approach. In overall terms, the practical strategies available to public managers for navigating governance systems, coupled with addressing questions regarding the democratic and methodological questions of securing and sustaining public value, should be a priority for future research.

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